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AMENDMENTS TO THE SPECIFICATION:

Please amend the Title as follows:

Ultrasonic Surgical System with Digital Control

Please amend the Abstract of the Disclosure starting at page 34, line 3 as follows:

An ultrasonic surgical system utilizes a digital control system to generate ultrasonic drive current for transducers that are located in a hand piece and are attached to a surgical scalpel or blade [in the hand piece] so as to vibrate the blade in response to the current. The digital control includes a digital signal processor (DSP) or microprocessor; a direct digital synthesis (DDS) device; a phase detection logic scheme, a control algorithm for seeking and maintaining resonance frequency; and design scheme that allows to regulate current, voltage, and power delivered to an ultrasonic [thereby a] device. [[Such]] The system allows the power versus load output curve to be tailored to a specific hand piece[, which improves efficiency and reduces heat. Further,] the components of the digital system are much less sensitive to temperature variations; and [, thereby allowing it to operate with narrow as needed frequency range around the desired resonance in order to avoid excitation of other resonances. Also,] the digital system provides increased flexibility in locating the resonance frequency of the blade and running diagnostic tests. [The start of a user initiated diagnostic test that requires movement of the blade is caused by operating two of the system switches, which guards against accidental operation of the blade which could be harmful if in contact with tissue and also generate false diagnostic results. In addition, the system has interlock with an Electrosurgical unit so that it is not effected by the electromagnetic interference generated by that unit.]